

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A percutaneous myocardial revascularization marking and therapeutic or diagnostic agent catheter delivery system comprising:

a treatment catheter having a proximal end interconnected with a source of tissue ablative energy and a distal end for applying that energy to the heart wall to create a channel therein;
and

a channel marking and drug delivery catheter subsystem connected to an imaging medium source and a source of a therapeutic or diagnostic agent and having a distal end proximate the distal end of the treatment catheter for applying both an imaging medium and the therapeutic or diagnostic agent in or proximate the channel.

2. (original) The system of claim 1 in which the channel marking and drug delivery catheter subsystem includes two catheters, one marking catheter having a distal end proximate the treatment catheter for applying the imaging medium, and a therapeutic or diagnostic agent delivery catheter having a distal end proximate the treatment catheter for applying the therapeutic or diagnostic agent in or proximate the channel.

3. (currently amended) A method of marking and delivery to a percutaneous myocardial revascularization channel a therapeutic or diagnostic agent, the method comprising:

inserting a catheter into a chamber of a heart of a patient;

applying tissue ablative energy through said catheter to create a channel in the heart wall;

introducing to the heart wall through said catheter in or proximate the channel an imaging medium for marking the position of that channel for imaging;

viewing said imaging medium via an external imaging device positioned outside of said patient; and

introducing to the heart wall proximate the channel or in the channel a therapeutic or diagnostic agent.